

Prior Art
Figure 1

FIG. 1

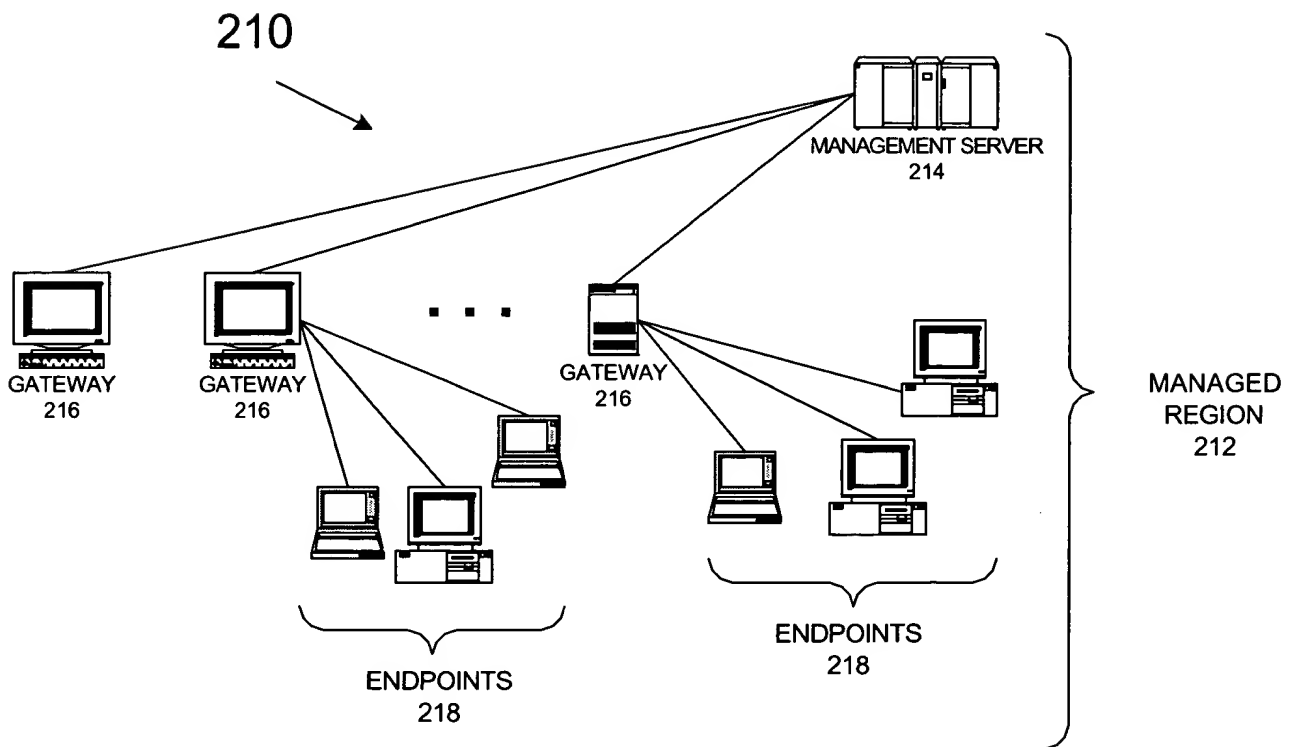


Figure 2A

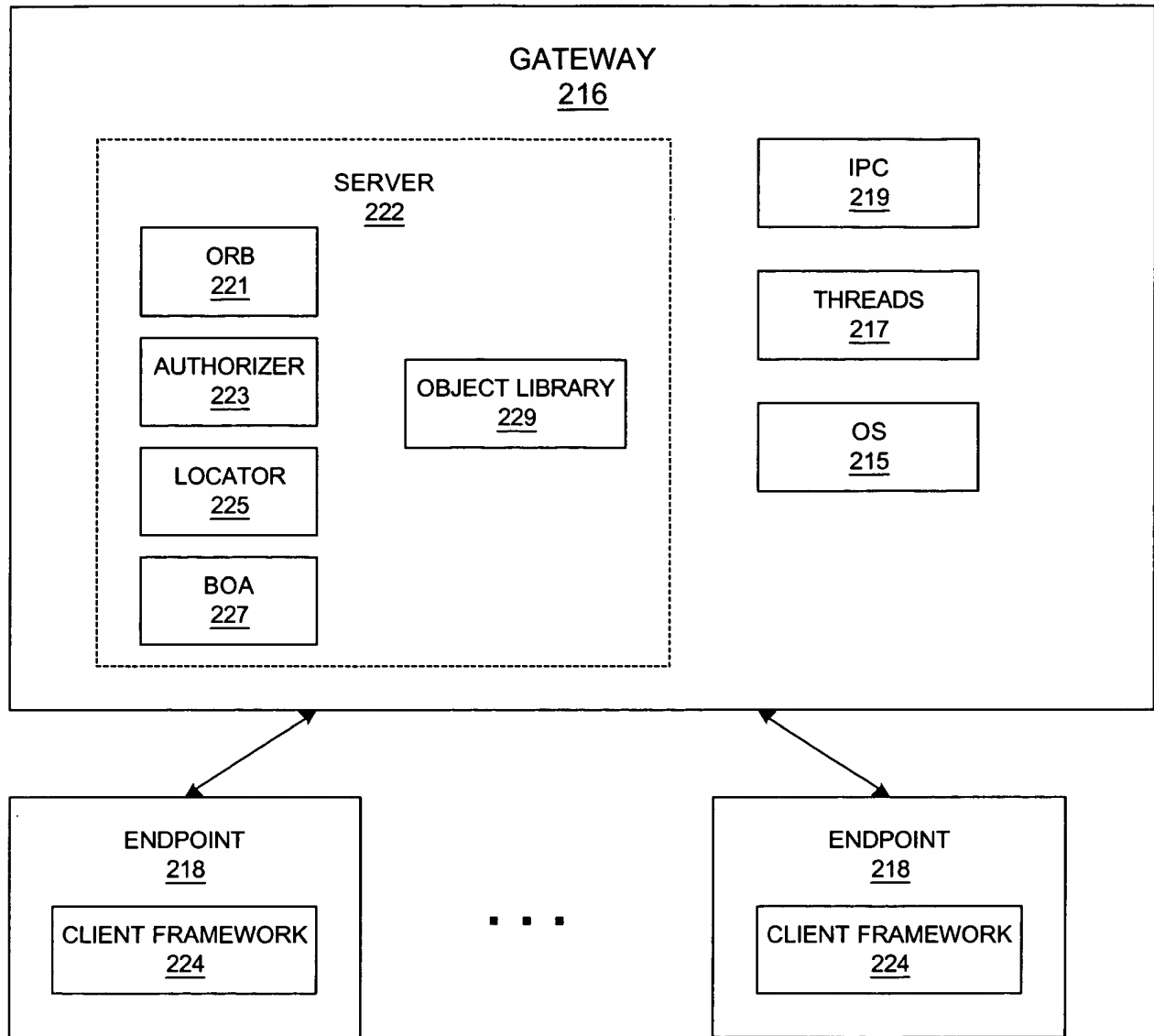


Figure 2B

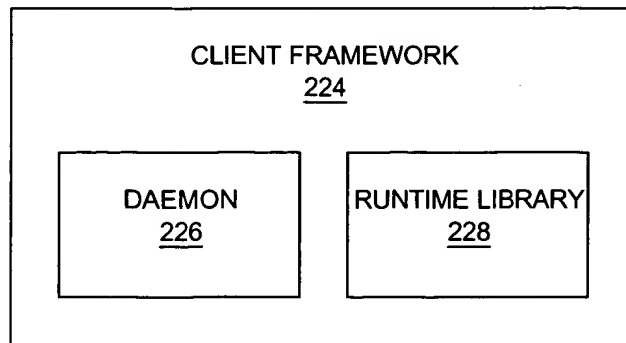


Figure 2C

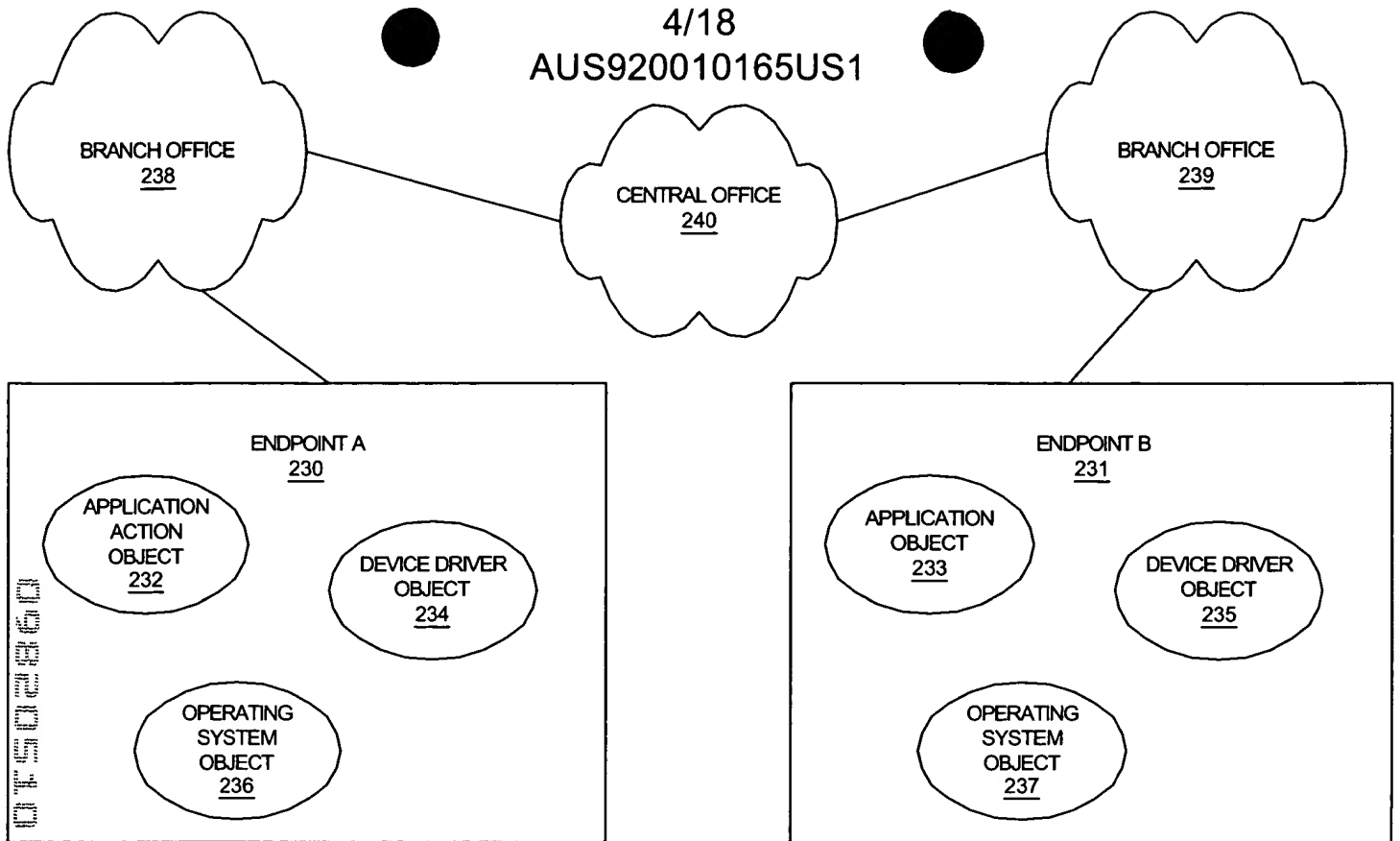


Figure 2D

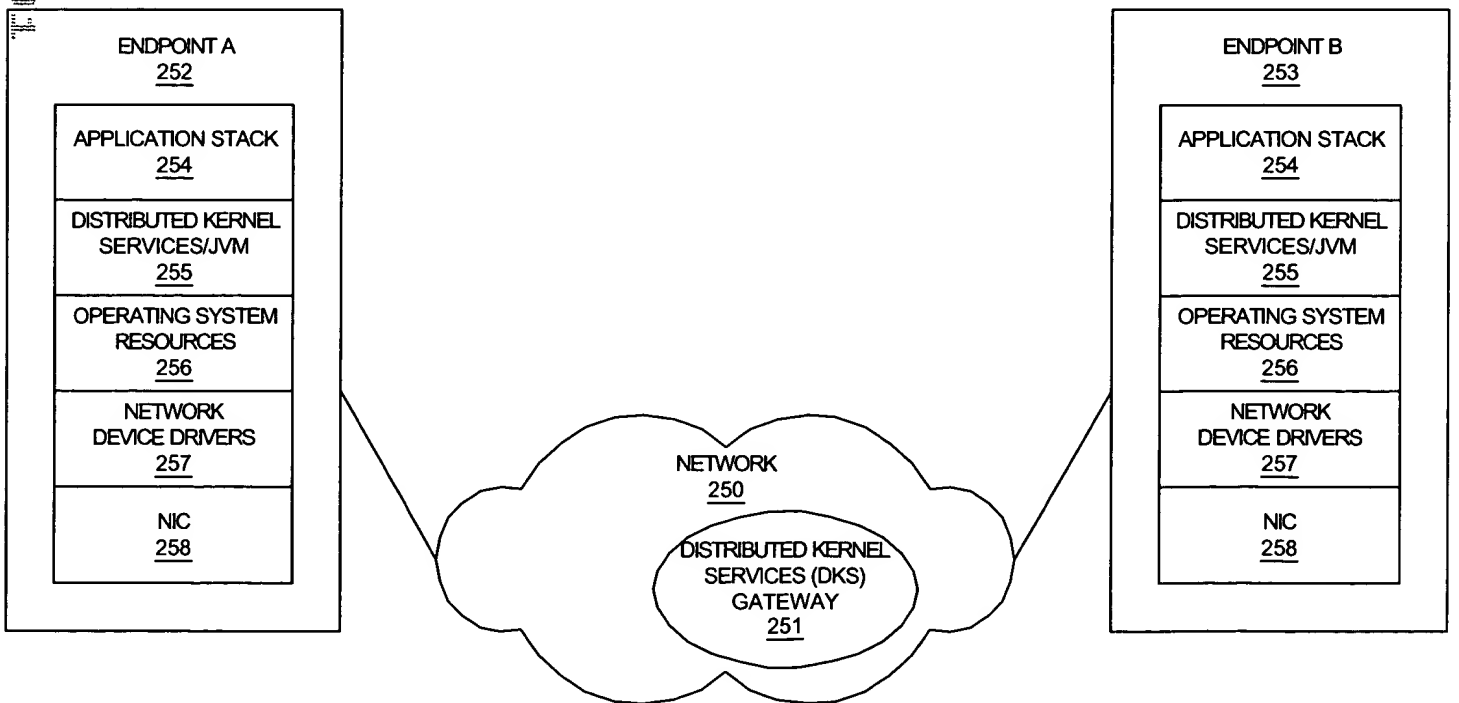


Figure 2E

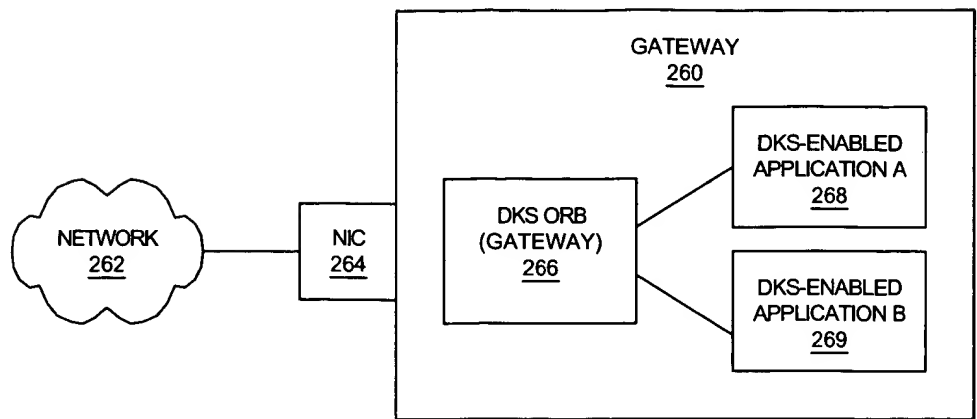


Figure 2F

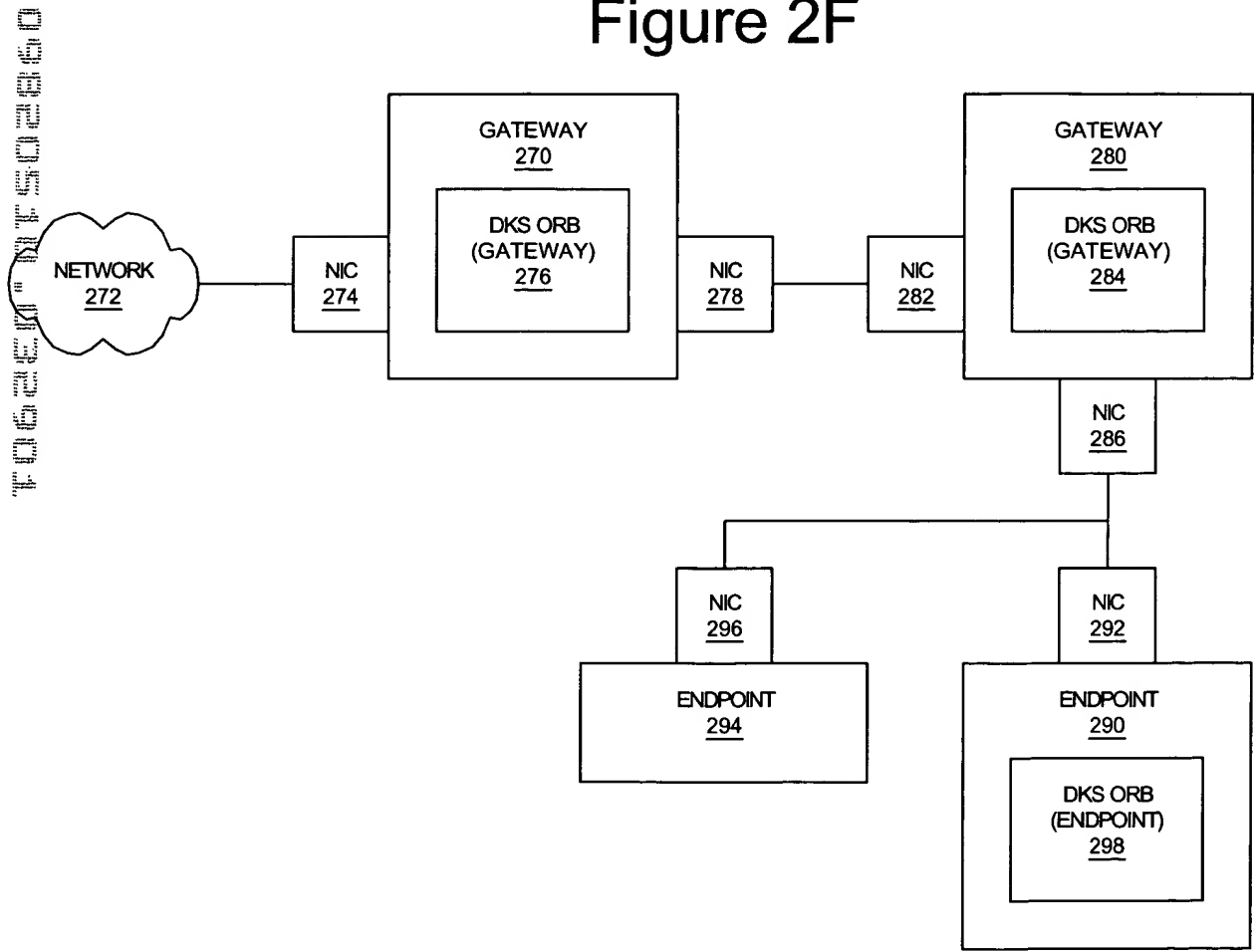


Figure 2G

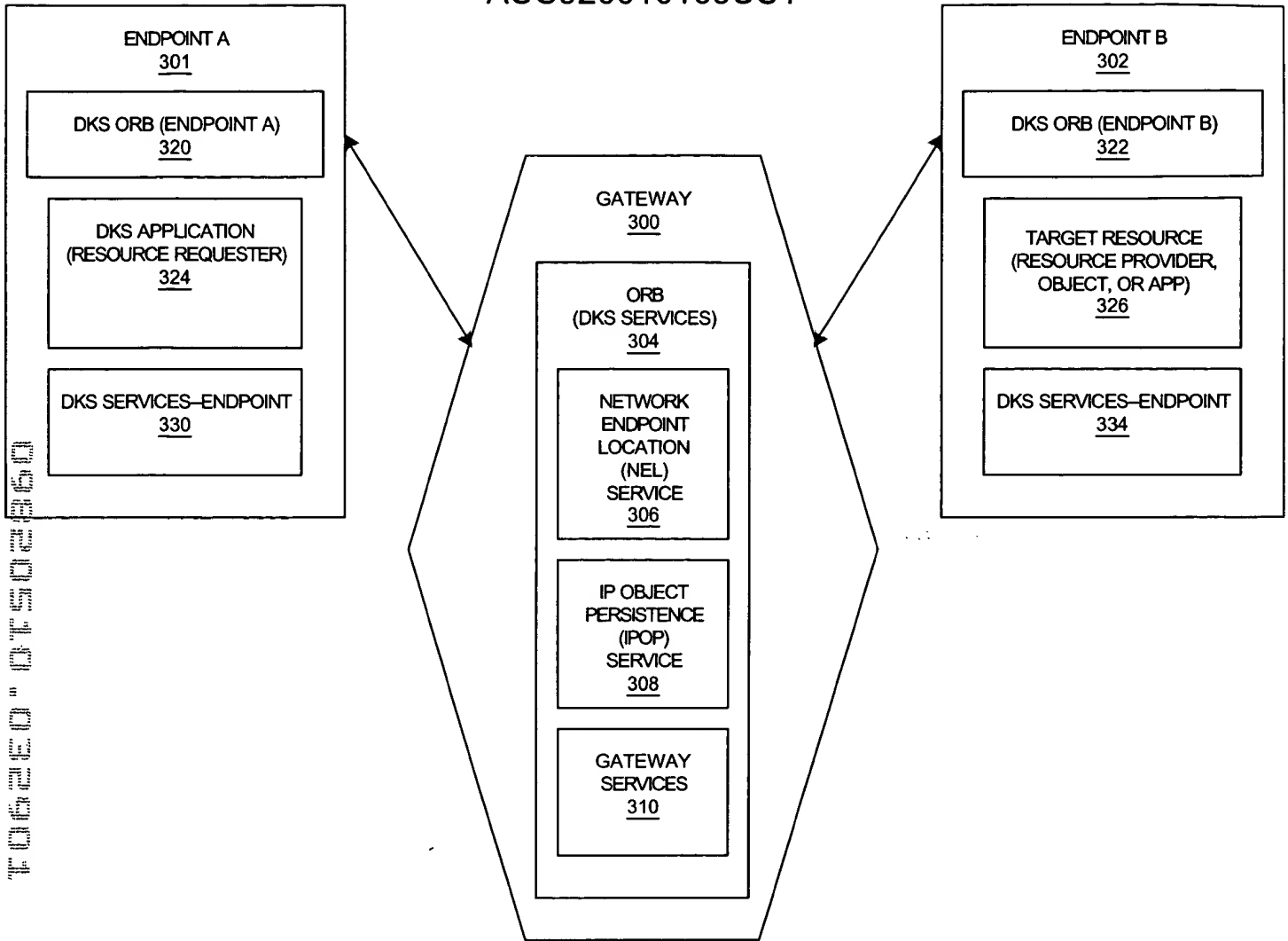


Figure 3

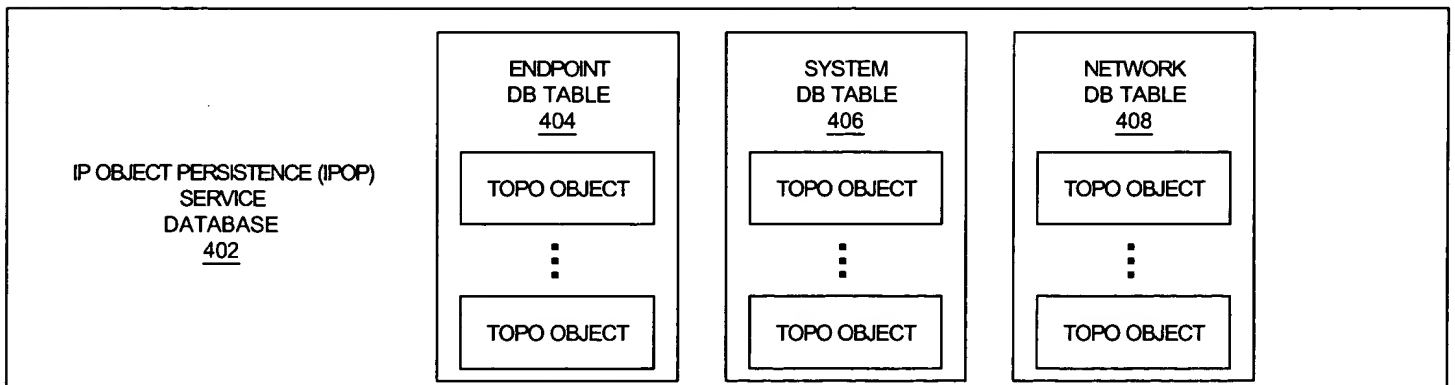


Figure 4

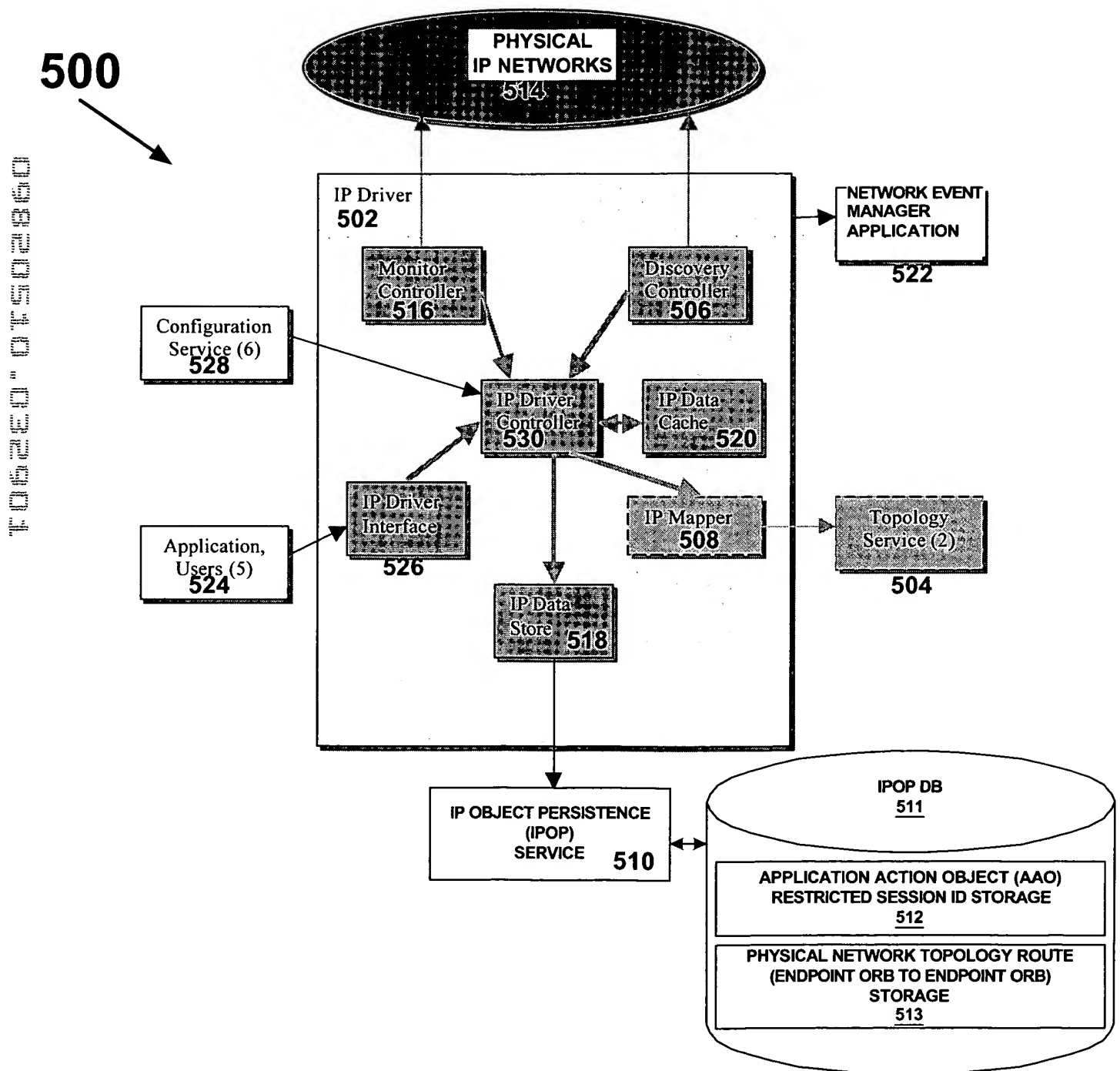


Figure 5A

FIG. 5B

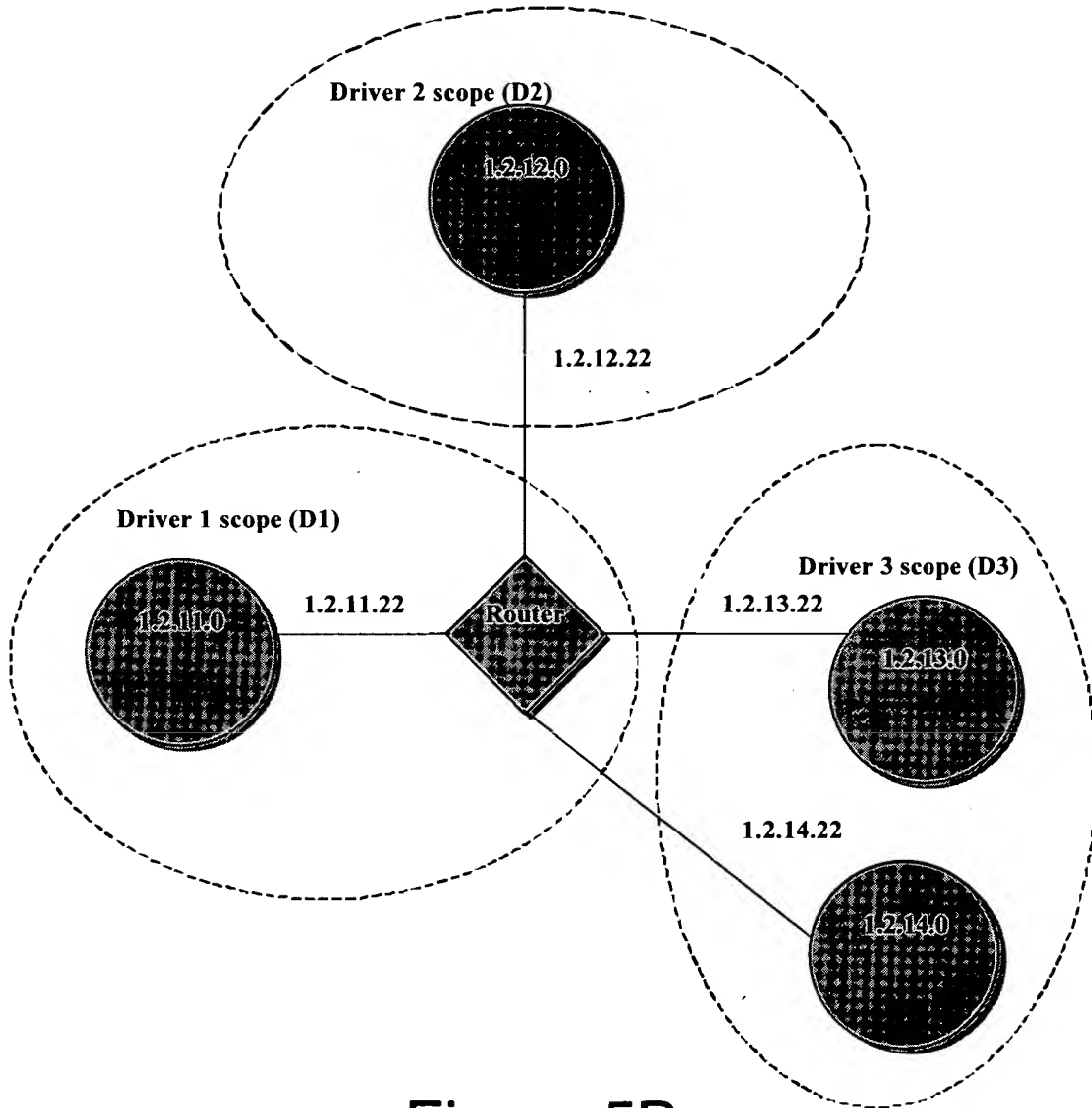


Figure 5B

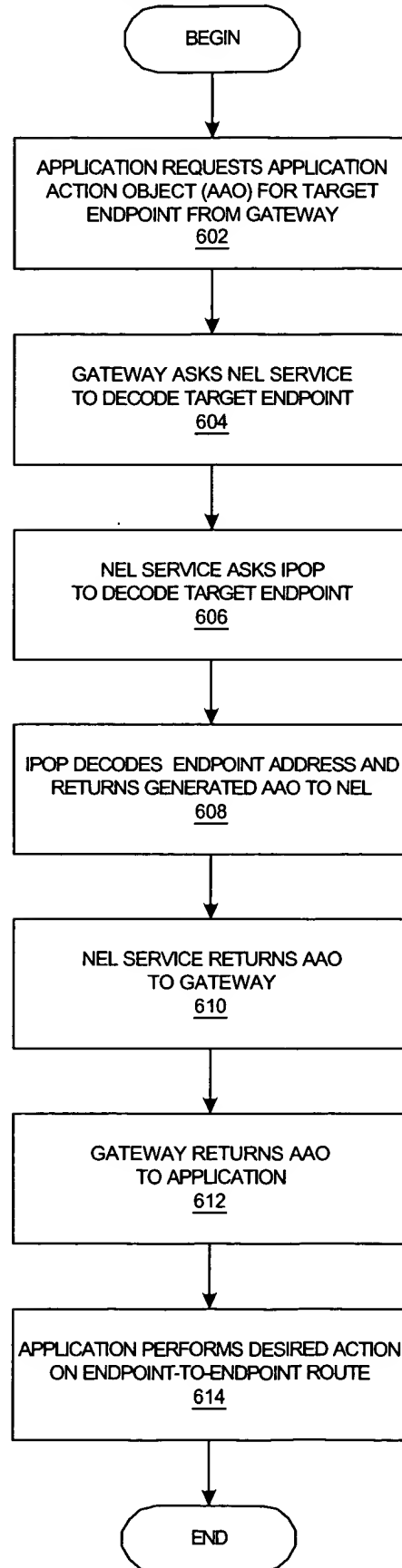


Figure 6A

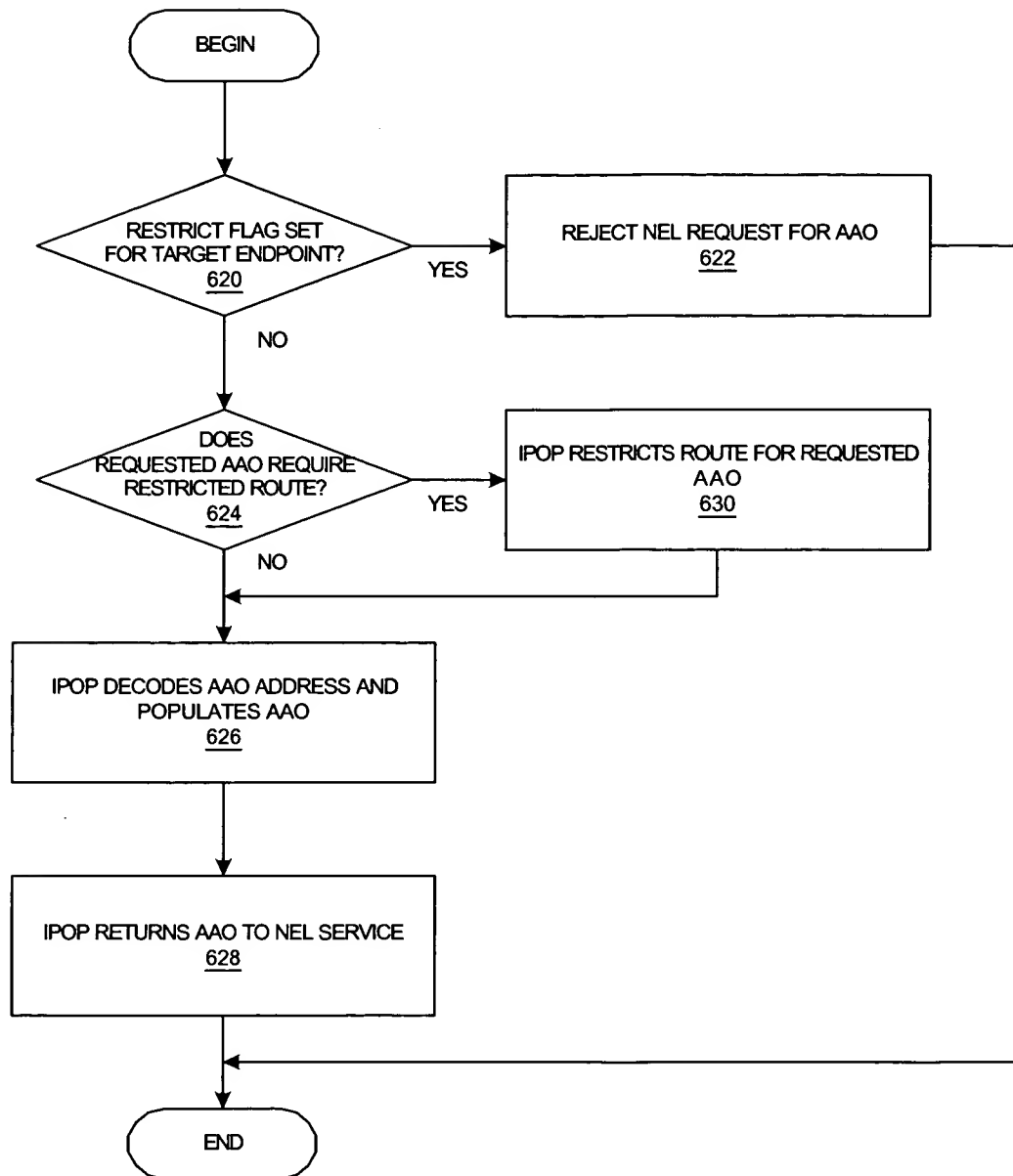


Figure 6B

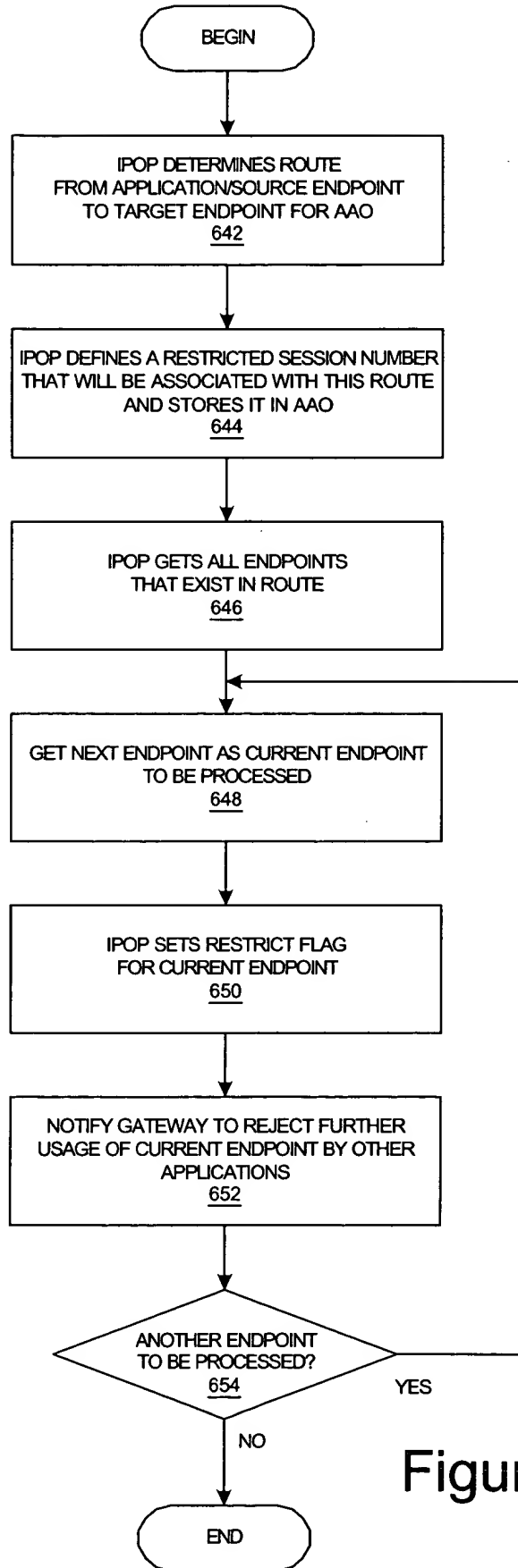


Figure 6C

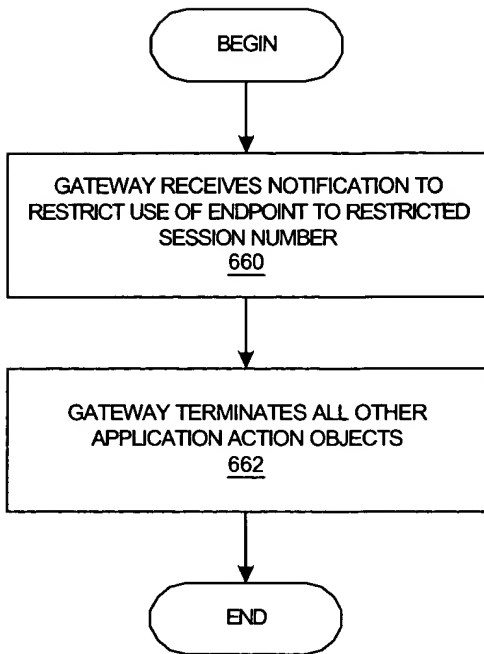


Figure 6D

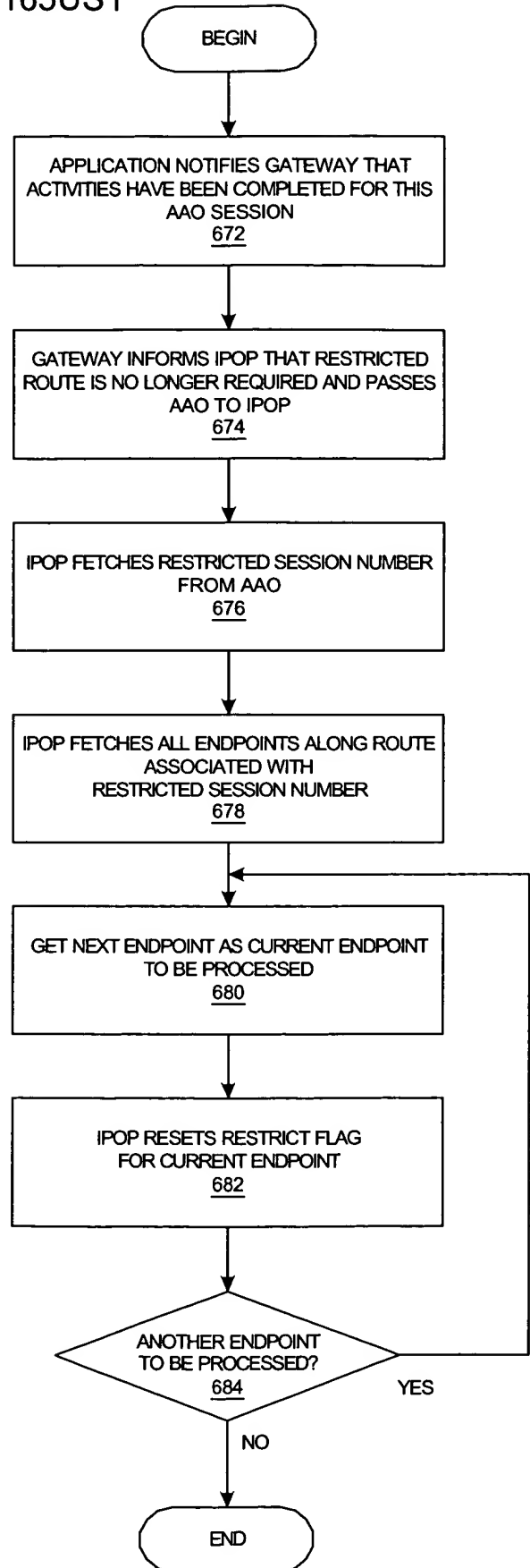


Figure 6E

FIG. 7A

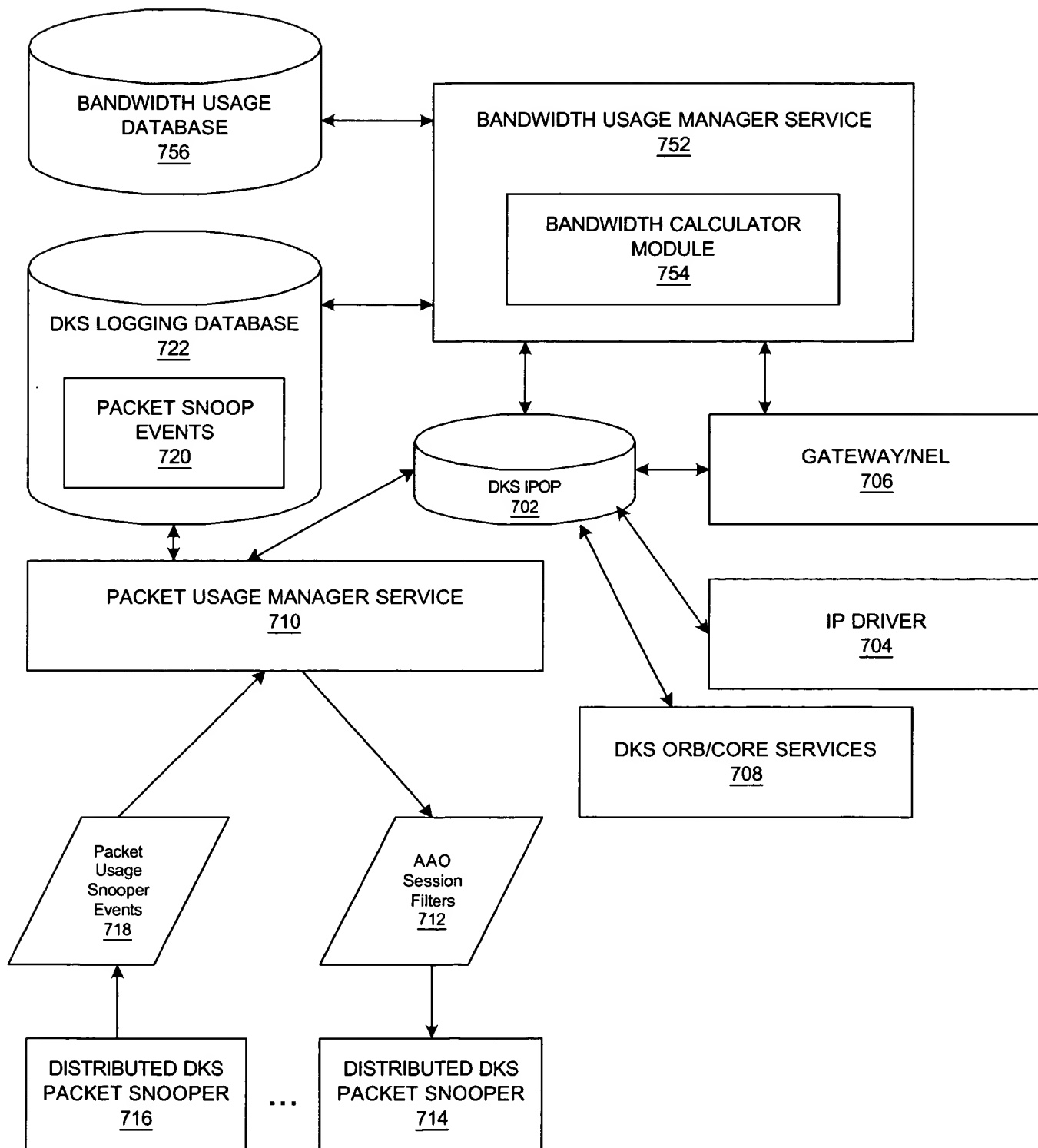


Figure 7A

```
Class DKSSnooperEvent {
    AAO Session;           // User, Application, Endpoint Route Information
    Vector packetSizes;
    Int TypeOfSnoopSession // Packet Type = 1; Small Packet Sizes Only =2; All Packets = 3
}
```

```
Class AAOSession {
```

```
    long AAOsessionID;
    PacketFilter p;
```

```
}
```

```
Class PacketFilter {
```

```
    Endpoint Route;
    int SizeMinThreshold;
    int SizeMaxThreshold;
    PacketType PacketTypeArray; // type(s) of network protocol packets
```

```
}
```

```
Public Class Endpoint {
```

```
    //public variables
    long EPObjctID; //ID to object (both private and public network addresses)
    InetAddress EPIPAddress; //physical network address (private or public)
    long EPVPN; //virtual private network ID
```

```
    //get/set of variables
```

```
    public long getObjectID( ) { ... }
    public InetAddress getIPAddress( ) { ... }
    public long getVPN( ) { ... }
```

```

.
.
.
}
```

Figure 7B

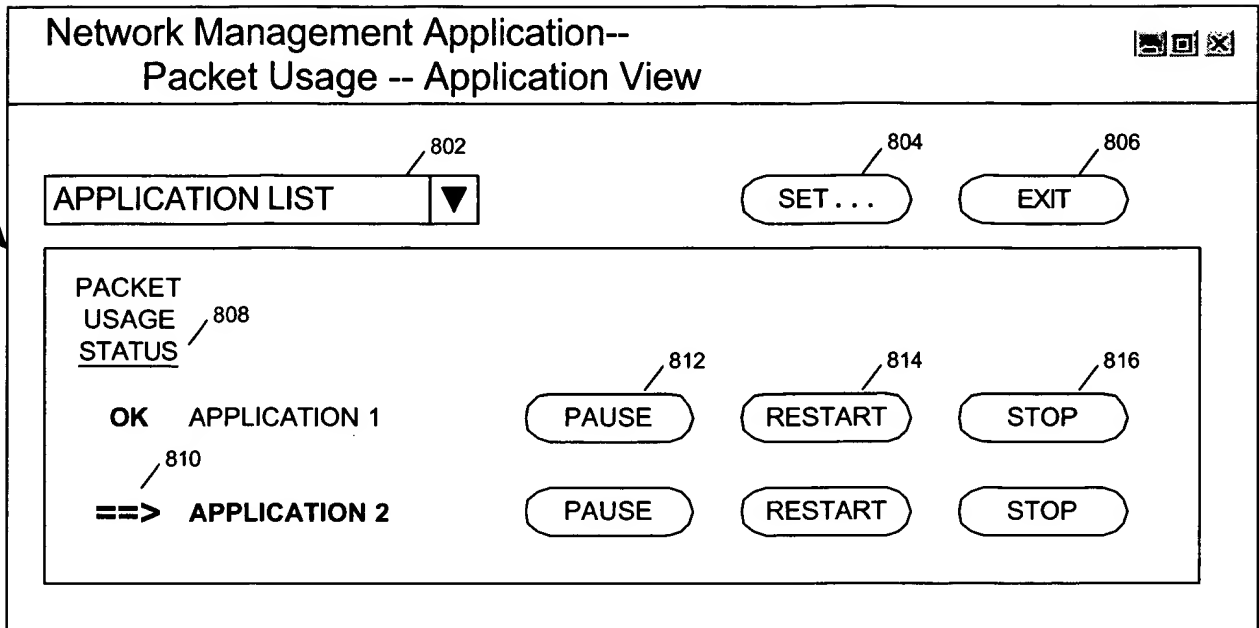


Figure 8A

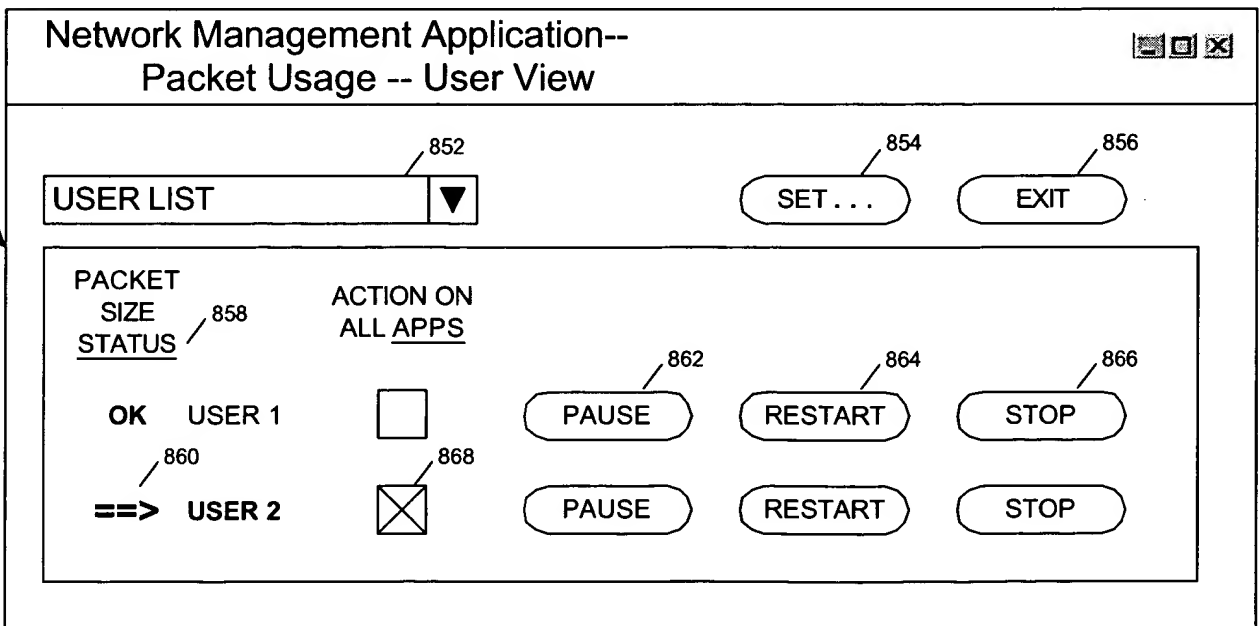


Figure 8B

Class BandwidthApplicationActionObject extends ApplicationActionObject {

BandwidthUsage
BandwidthUsage
User

predictedBWUsage;
actualBWUsage;
u;

// Predicted bandwidth usage based on selected category
// Actual bandwidth usage

}

Figure 10

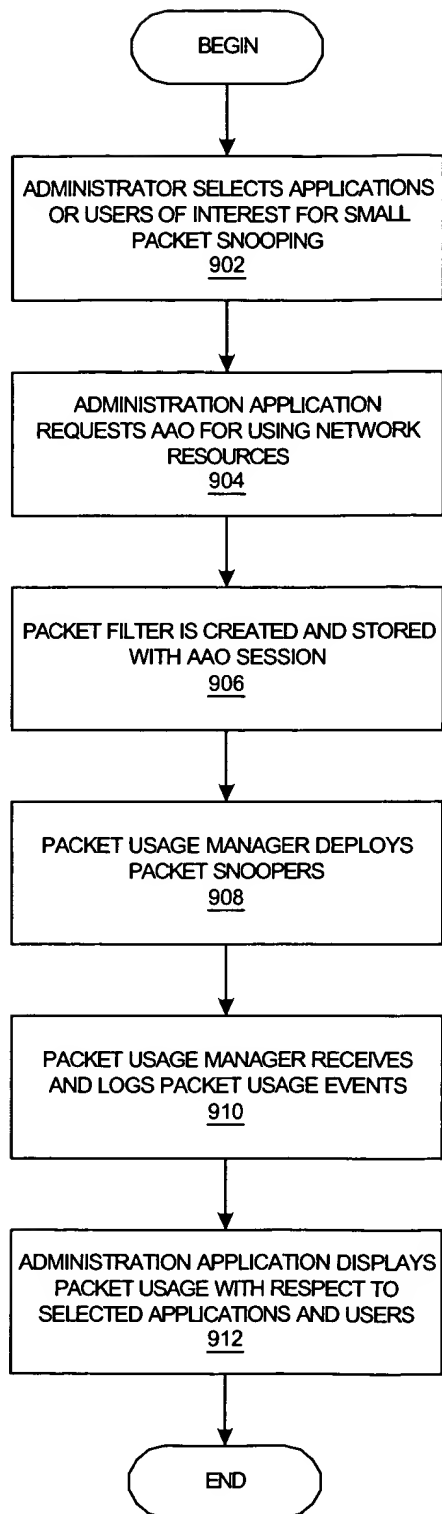


Figure 9A

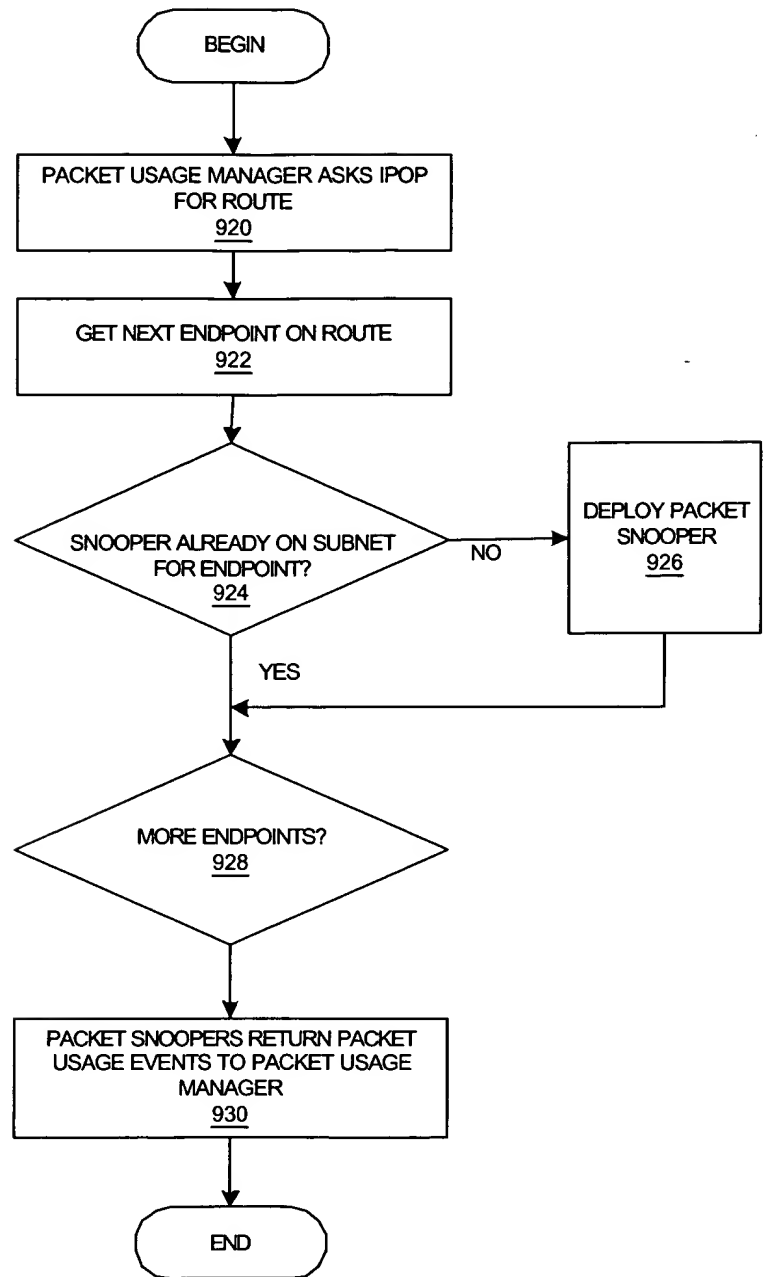


Figure 9B

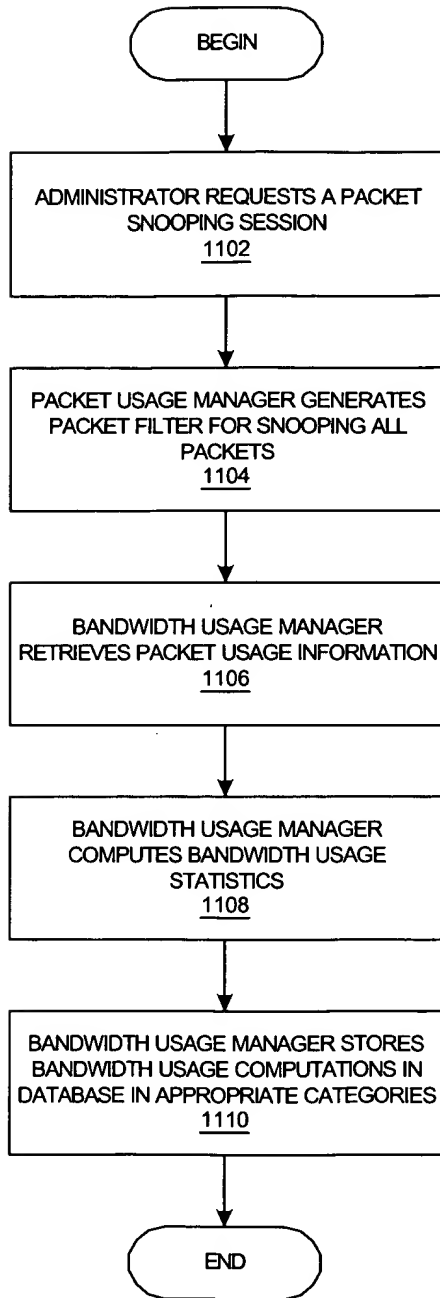


Figure 11A

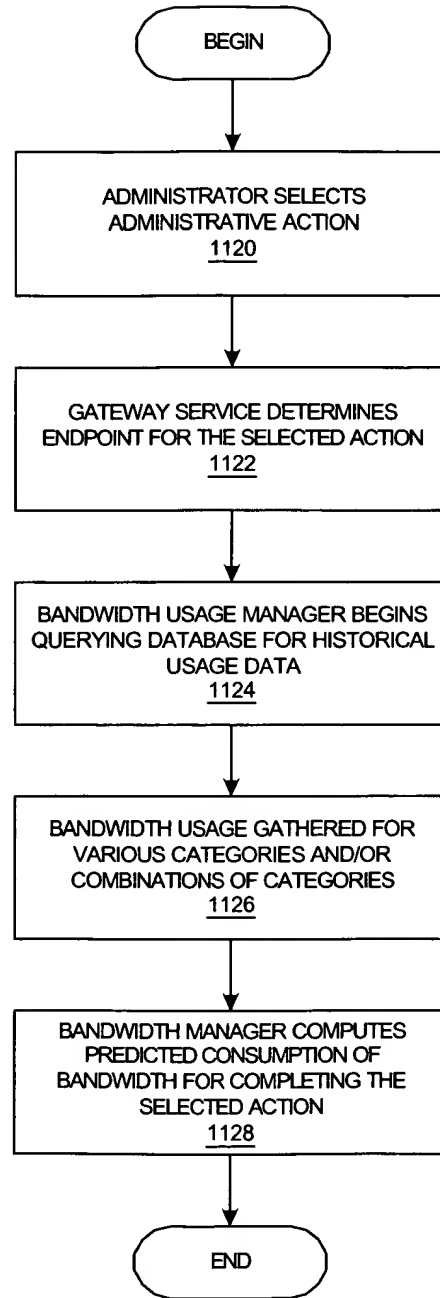


Figure 11B

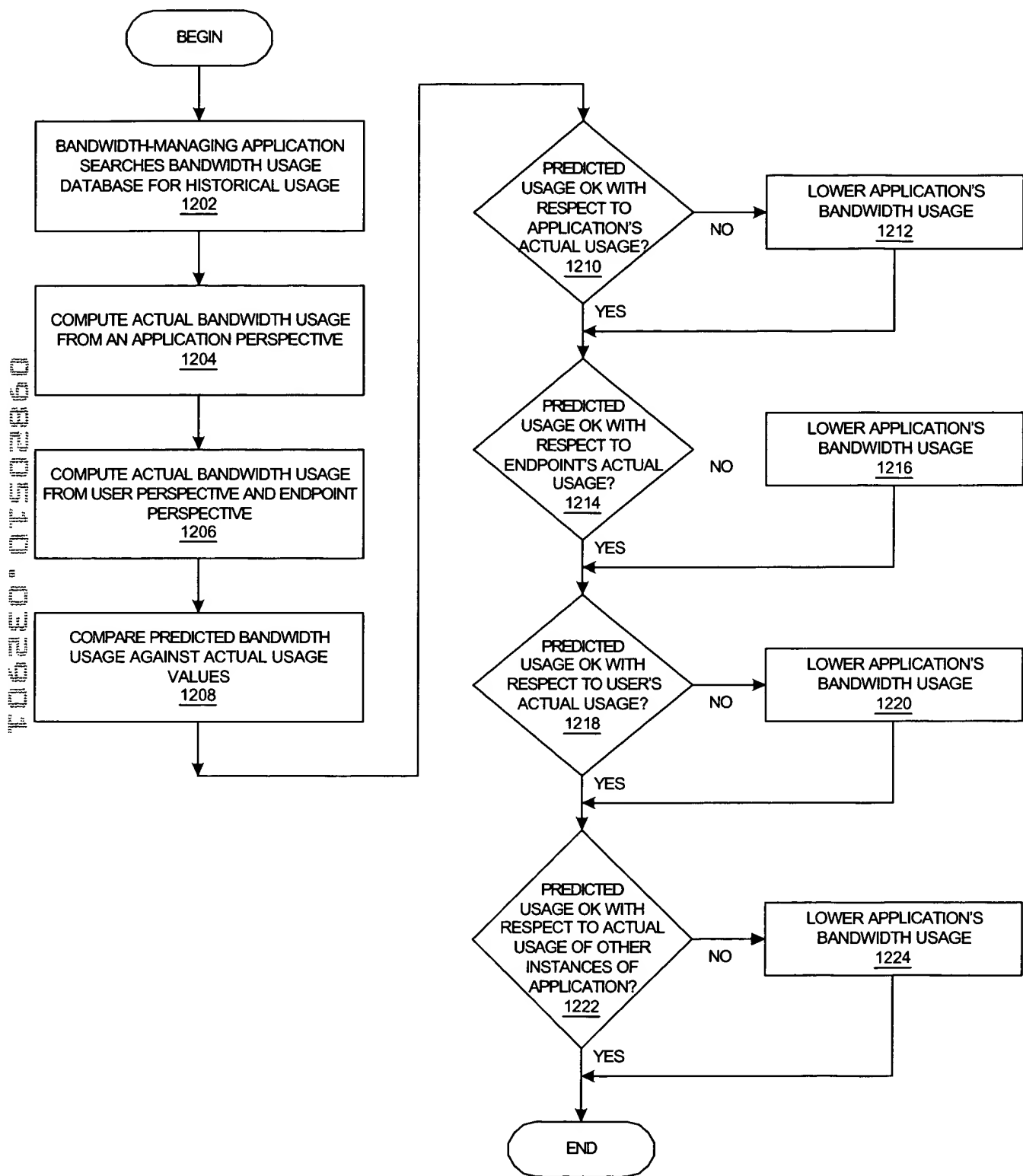


Figure 12